

In the Specification:

On page 1, rewrite the paragraph 3 to read as follows:

A digital watermark can ~~be~~ more easily ~~be~~ detected and read from a high quality, high resolution image, than from a low quality or low resolution image. In some situations multiple images having similar picture content are available. There are known techniques for combining multiple low resolution images which have similar content in order to make one relatively high resolution image. Such a technique is, for example, described in US Patent 6,208,765. The system shown in patent 6,208,765 aligns images using a reference coordinate system. An enhanced ~~images is then synthesizes image is then synthesized,~~ and regions of image overlap (i.e. regions of similar image content in multiple images) have improved quality. The synthesis process combines information in overlapping regions to form an enhanced image that corrects many of the image impairments.

Rewrite paragraph 4 (bridging pages 1 and 2) to read as follows:

Inexpensive low resolution cameras designed for connection to personal computers are in widespread use. Such ~~camera cameras~~ are herein referred to as PC cameras. PC cameras generally capture pixels in what is often termed a "Bayer pattern". A Bayer pattern is a four pixel square where only one color is captured for each pixel. The colors captured for the two pixels on the first line are red and green. The colors captured for the two pixels on the second line are green and blue. Interpolation is used to calculate three colors for each pixel position. The positions in the Bayer pattern where ~~the value of a color is~~ values of colors are calculated rather than actually measured are herein termed "holes".

Rewrite paragraph 5 (page 2) to read as follows:

If a camera which uses pixel interpolation is used to acquire a digital image of a watermarked physical image, the pixel interpolation may make it more difficult to accurately read the watermark from the acquired digital image. However, with **camera cameras** such as PC cameras, it is easy to obtain multiple images which have almost identical content. The present invention is directed to using such multiple images to minimize or eliminate the need to interpolate to obtain a high resolution image.

Rewrite paragraph 16 (page 4) to read as follows:

The camera 101 can for example be the camera marketed by the Intel Corporation under the trademark "Intel PC Camera Pro Pack". Such a camera is relatively inexpensive and it produces an image with a 640 by 480 resolution. The camera has detectors positioned in a 640 by 480 configuration; however, each detector only captures one color. The color captured by each ~~detectors~~ **detector** is that specified by a Bayer pattern. Figure 2 illustrates how colors are captured in a Bayer pattern. There is a "hole" for each color not captured at a particular location. In the prior art, interpolation is used to determine the values of the colors for the "holes" in the Bayer pattern. With the present invention interpolation is not used to fill in the holes in the Bayer pattern.

Rewrite paragraph 19 (page 5) to read as follows:

Figure 3 illustrates (in a greatly exaggerated form) how the red color from four relatively low resolution images 301 to 304 can be combined into the red color for one relatively high resolution image. The red pixels in image 301 are represented by outline circles, the red pixels in image 302 are represented by outline squares, the red pixels in image ~~30~~ **303** are represented by solid circles and, the red pixels in image 304 are represented by solid squares. Only the red pixels (i.e. the pixels in the upper left hand corner of a Bayer square) are shown in Figure 3. It should be understood that the other pixels are handled in a similar manner. Furthermore, Figure 3 only shows a small number

of pixels[.]; naturally in an actual image there would be many such pixels.

On page 13, rewrite the text of the Abstract as follows:

Slight camera movement between ~~when capture of~~ successive images ~~are captured~~ is advantageously utilized to minimize or eliminate the need to interpolate in order to fill in the "holes" in a Bayer pattern. The captured color values from multiple appropriately positioned images are used to fill ~~in the "holes" in a Bayer pattern~~ these holes. ~~Fore~~ **For** example, instead of interpolating the value of red for the second pixel position on the first row of a Bayer pattern, an image is selected which is positioned one pixel to the right of the first image, and the red vales from this image are used for the red values of the second pixel on the first line. ~~The value~~ Values of the pixels in multiple images which are appropriately aligned to each pixel position are averaged to generate a better value for each pixel position. Information carried by a digital watermark (either alone or together with other techniques) is used to determine the alignment of the images. Images are selected which are positioned so that corresponding pixels fall within a specified tolerance from a location in a Bayer pattern. The pixel values of the images which fall within the specified tolerance of each pixel position in a Bayer pattern are selected and used for the alignment.